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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,125	06/21/2004	John E. Prevost	8482/012	8289
41129	7590	06/07/2007		
NEIL J. COIG			EXAMINER	
2355 DRUSILLA LANE			MARX, IRENE	
BATON ROUGE, LA 70809			ART UNIT	PAPER NUMBER
			1651	
			MAIL DATE	DELIVERY MODE
			06/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/710,125	PREVOST ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Irene Marx	1651	

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 April 2007.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

The amendment filed 4/16/07 is acknowledged. Claims 1-3 are being considered on the merits to the extent that they pertain to enzymes and the secondary treatment and the product is cyclodextrin.

Claims 4-5 are withdrawn from consideration as directed to a non-elected invention.

The claims should be amended to reflect the claimed invention.

Claims 1-3 are/remain rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lima *et al.* ( $\beta$ -Cyclodextrin production by simultaneous fermentation and cyclization. Appl Biochem Biotechnol. 1998 Spring; 70-72:789-804).

The claims are directed to an ethanol production process wherein a sucrose or starch-containing feedstock is hydrolyzed under fermentation conditions and wherein the secondary treatment agent cyclodextrin glucosyl transferase (CTGase) is added. The reaction is carried out at a temperature of about 20°-40°C and a pH of between about 4.0 and 6.5.

Lima teaches an ethanol production process wherein a sucrose or starch-containing feedstock is hydrolyzed under fermentation conditions and wherein the secondary treatment agent cyclodextrin glucosyl transferase (CTGase) is added. See, e.g., page 792, paragraph 2 and Figure 4.

**Response to Arguments.**

Applicant's arguments have been fully considered but they are not deemed to be persuasive.

Applicant argues that Lima does not disclose an ethanol production process utilizing both a standard ethanol fermentation agent and a secondary agent with certain properties. However, it is clear that cyclodextrin glucosyl transferase has the required properties, since this is the enzyme envisioned.

It is noted that the claimed invention merely requires that a sucrose or starch-containing feedstock is hydrolyzed to some extent under fermentation conditions to produce at least some ethanol and whole stillage and that the secondary treatment should have the properties of cyclodextrin glucosyl transferase. That the cassava feedstock is hydrolyzed prior to the fermentation process is irrelevant to the invention as claimed, as long as there is at least some

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starch remaining which is hydrolyzed during fermentation, as long as there is at least some ethanol production and as long as cyclodextrin glucosyl transferase is added. Since the process of Lima *et al.* disclosed at paragraph 2 of page 792 encompasses the fermentation of yeast, it is submitted that the microorganism hydrolyzes the liquefied cassava at least to some extent, produces ethanol as a consequence of the metabolic process and clearly the required as cyclodextrin glucosyl transferase is added. It is also noted that the by-product is cyclodextrin.

Whether or not simultaneous fermentation of the cassava starch in the presence of both the  $\alpha$ -amylase enzyme and the CGTase enzyme is desirable is not relevant to the anticipation rejection made.

Therefore the rejection is deemed proper and it is adhered to.

No claim is allowed.

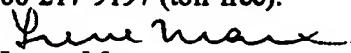
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irene Marx whose telephone number is (571) 272-0919. The examiner can normally be reached on M-F (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Irene Marx  
Primary Examiner  
Art Unit 1651